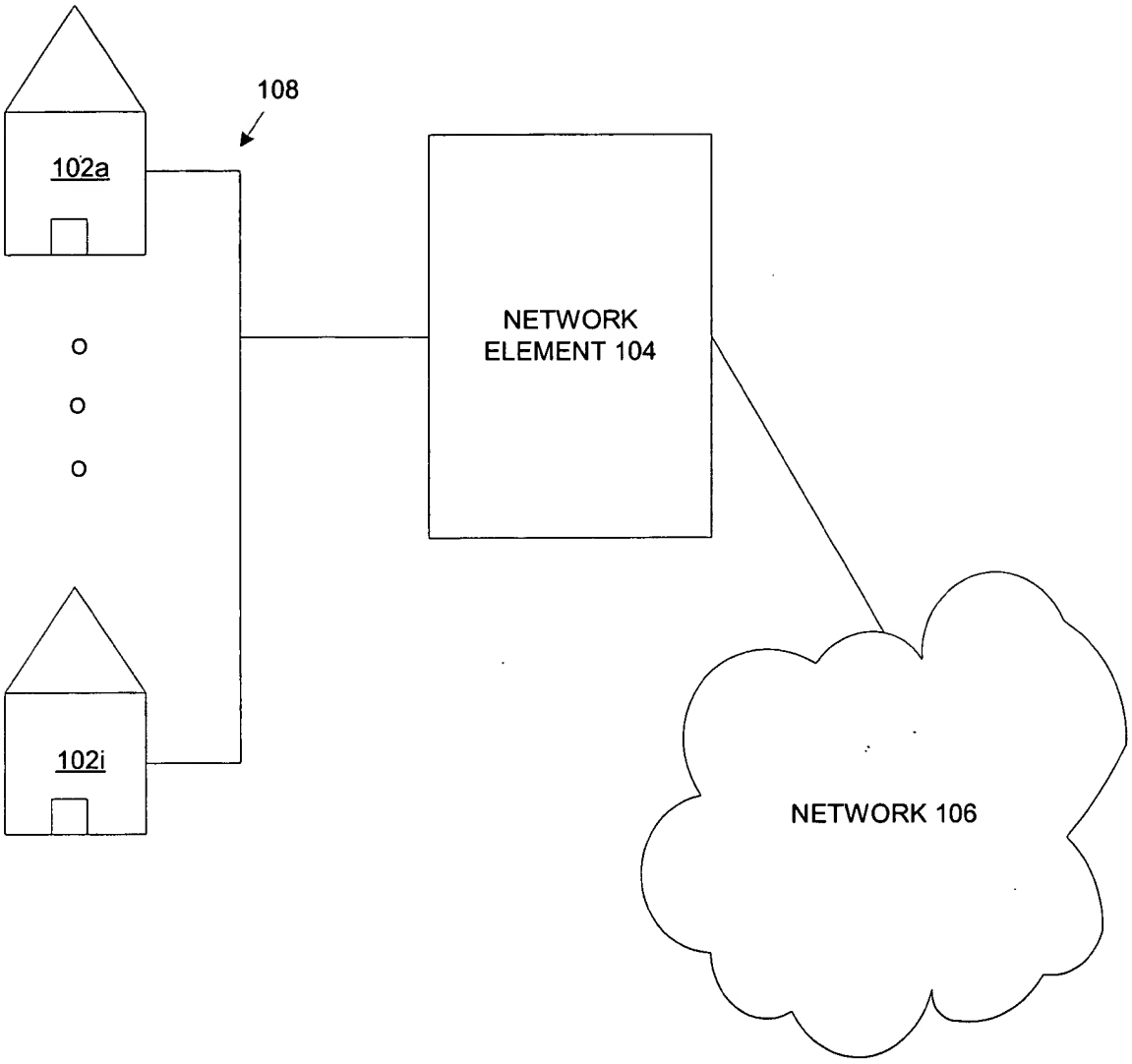

FIG. 1

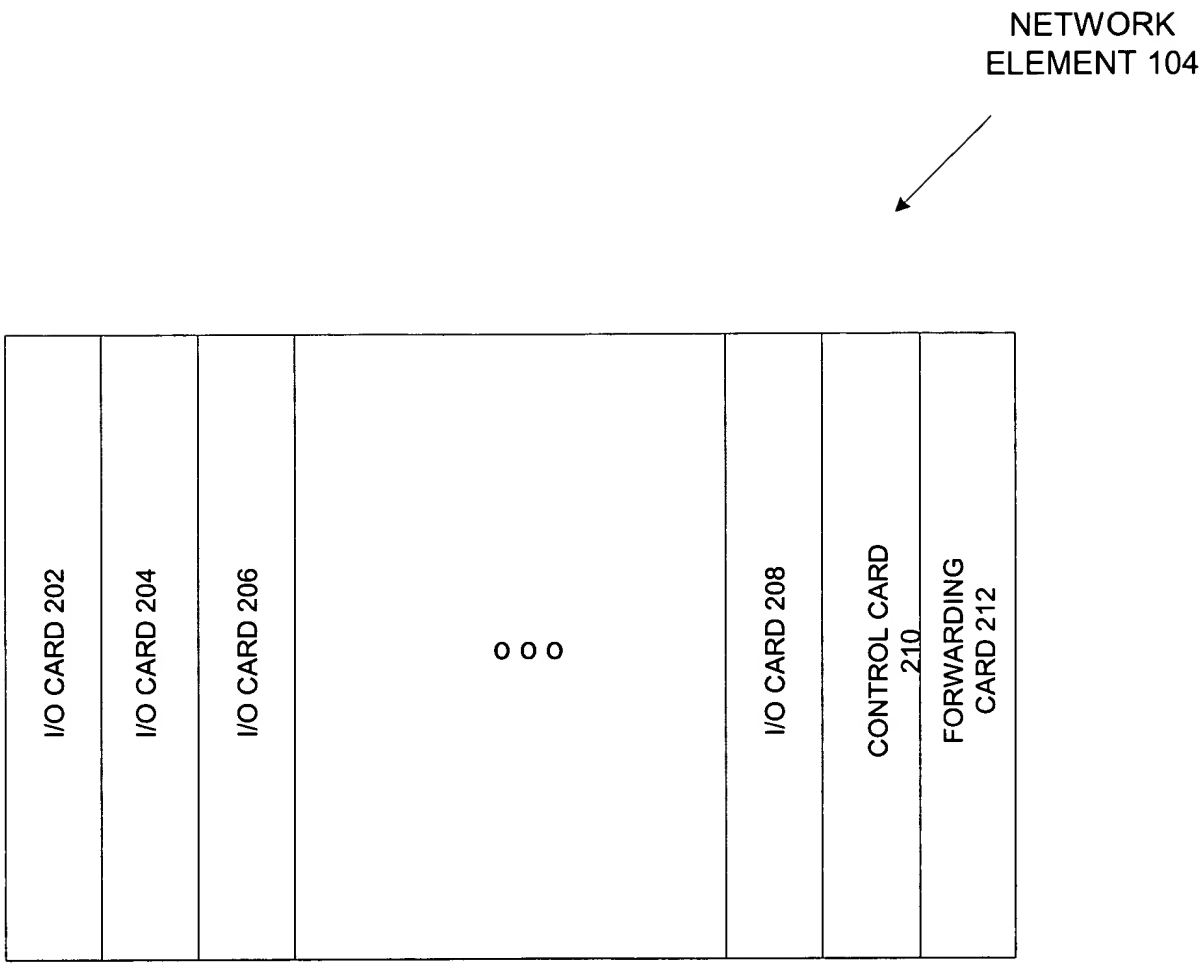
NETWORK
ELEMENT 104
I/O CARD 202
I/O CARD 204
I/O CARD 206
o o o
I/O CARD 208
CONTROL CARD
210
FORWARDING
CARD 212

FIG. 2

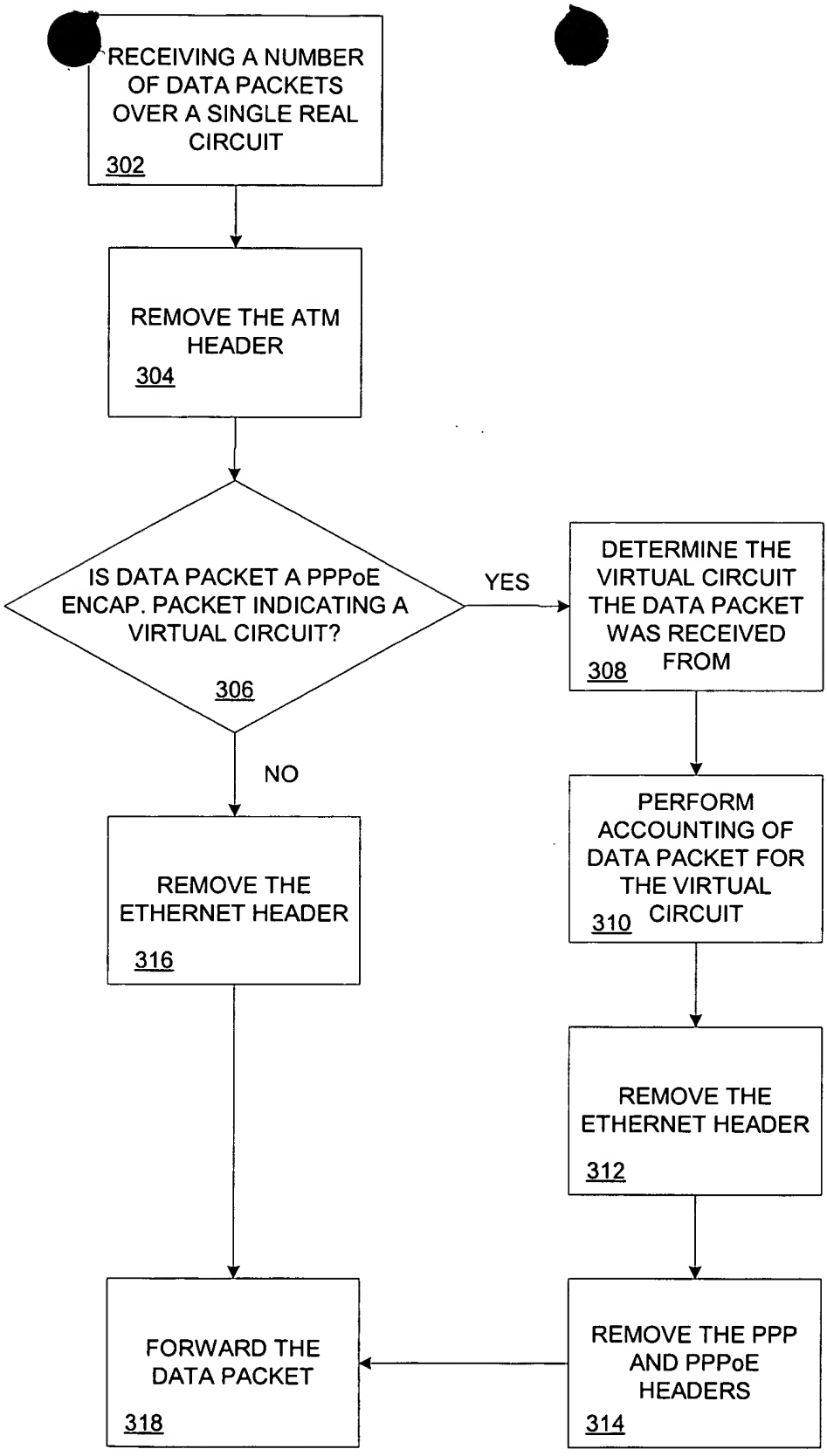
RECEIVING A NUMBER OF DATA PACKETS OVER A SINGLE REAL CIRCUIT
302
REMOVE THE ATM HEADER
304
IS DATA PACKET A PPPoE ENCAP. PACKET INDICATING A VIRTUAL CIRCUIT?
306
YES
NO
DETERMINE THE VIRTUAL CIRCUIT THE DATA PACKET WAS RECEIVED FROM
308
PERFORM ACCOUNTING OF DATA PACKET FOR THE VIRTUAL CIRCUIT
310
REMOVE THE ETHERNET HEADER
312
REMOVE THE PPP AND PPPoE HEADERS
314
REMOVE THE ETHERNET HEADER
316
FORWARD THE DATA PACKET
318

FIG. 3

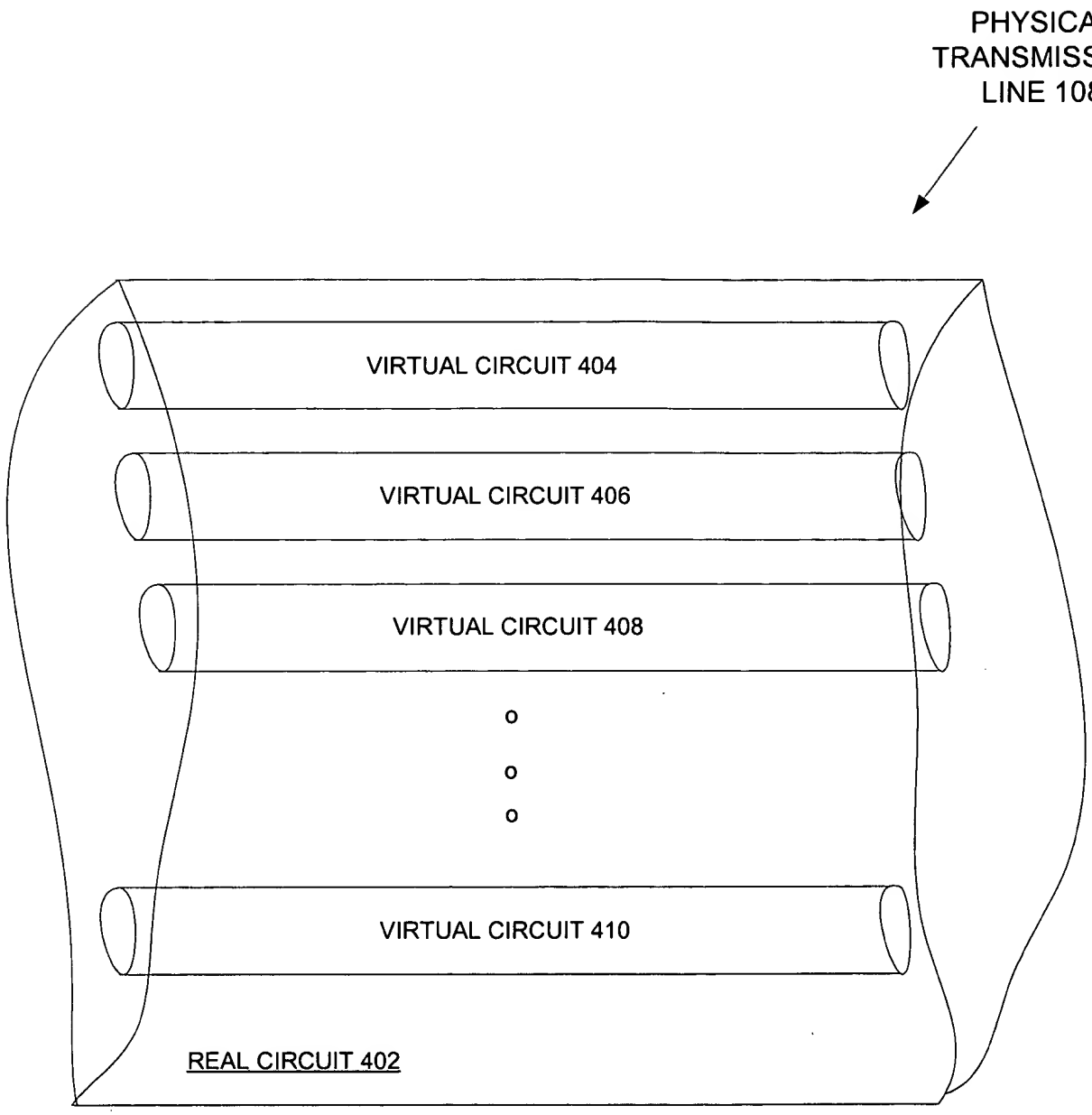
PHYSICAL
TRANSMISSION
LINE 108
VIRTUAL CIRCUIT 404
VIRTUAL CIRCUIT 406
VIRTUAL CIRCUIT 408
o
o
o
VIRTUAL CIRCUIT 410
REAL CIRCUIT 402

FIG. 4

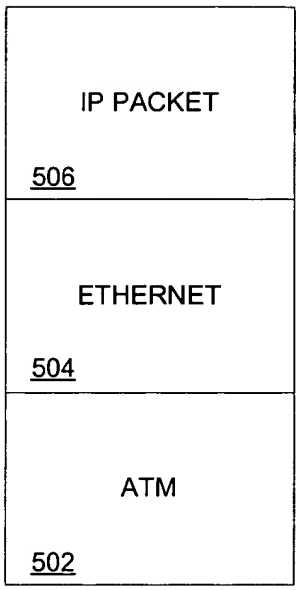
IP PACKET
506
ETHERNET
504
ATM
502

FIG. 5a

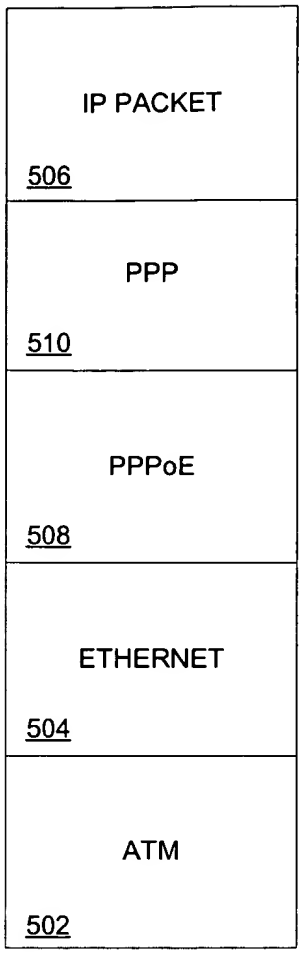
IP PACKET
506
PPP
510
PPPoE
508
ETHERNET
504
ATM
502

FIG. 5b

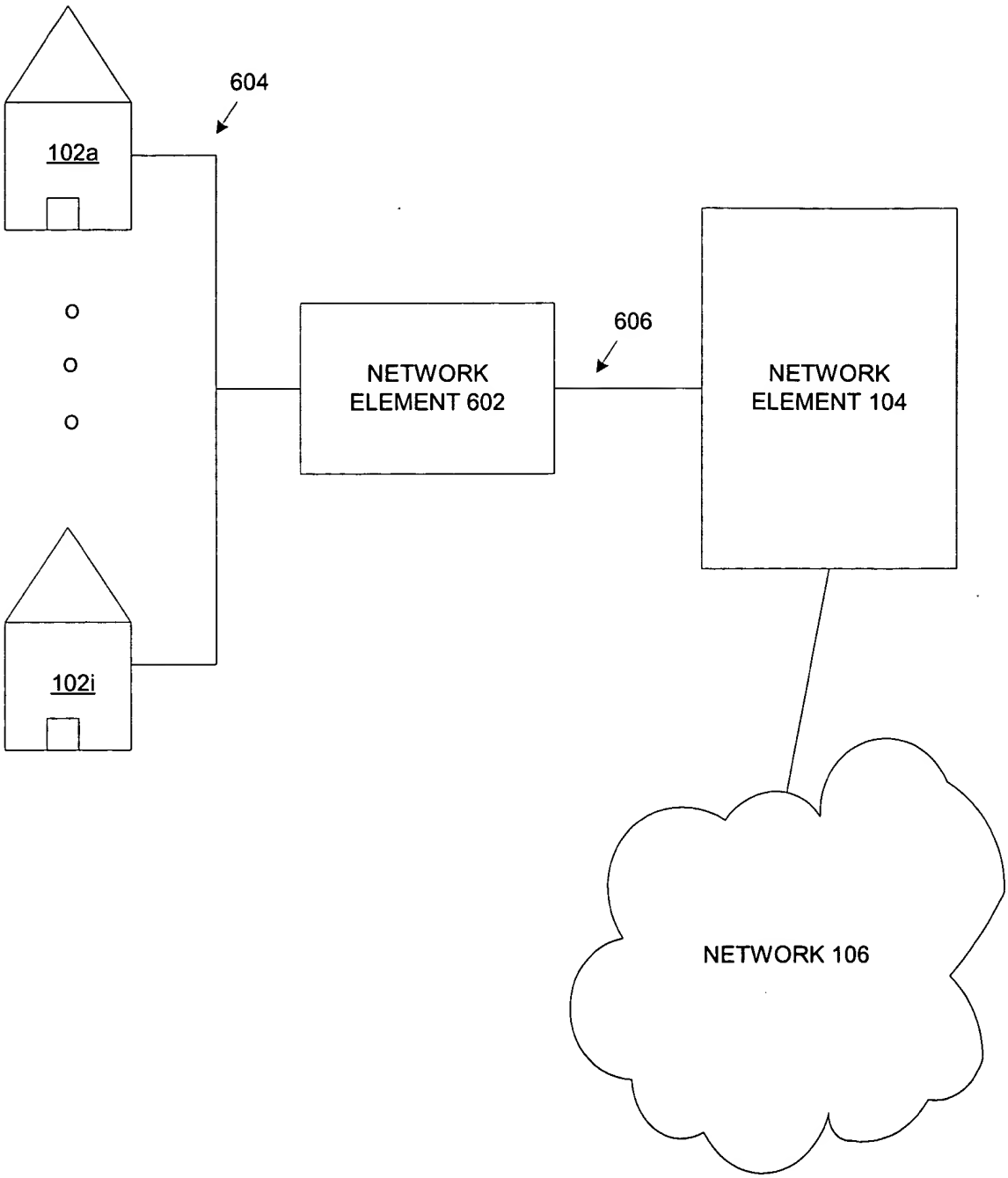
604
102a
o
o
o
102i
NETWORK
ELEMENT 602
606
NETWORK
ELEMENT 104
NETWORK 106

FIG. 6